This summary of 510(k) safety and effectiveness information is submitted in accordance with the requirements of the Safe Medical Devices Act of 1990 and 21 CFR §807.92.

1. The submitter of this premarket notification is:

Zety Billard Regulatory Affairs Specialist Ultrasound & Monitoring Systems Philips Medical Systems 3000 Minuteman Road, MS0480 Andover, MA 01810-1099

MAR 13 2008

Tel: 978 659 3603 Fax: 978 685 5624

Email: zety.billard@philips.com

This summary was prepared on 15 February 2008.

2. The name of this device is the Philips ST/AR ST and Arrhythmia Software, Release J.0. Classification names are as follows:

Classification	ProCode	Description
870.1025, II	74 MLD	Monitor, ST Alarm
870.1025, II	74 DSI	Arrhythmia Detector and Alarm
None	74 MHX	Physiological Monitor, Patient Monitor

- 3. The new device is substantially equivalent to the previously cleared ST/AR ST and Arrhythmia Software device marketed pursuant to K964122, K991773, K001348, K003621, K014261, K021251, K033513, K040357, K070260 and the GE Dash monitor K073462 and GE EK-Pro Arrhythmia Detection Algorithm K031320.
- 4. The modification is a software-based change that adds the following features:
 - Atrial Fibrillation alarm
 - Heart Rate configuration to short or yellow long alarm
 - Addition of messages indicating causes of invalid QT measurement
- 5. The new device has the same Indications for Use and Intended Use as the legally marketed predicate devices.
- 6. The new device has the same technological characteristics as the legally marketed predicate devices.
- 7. Verification, validation, and testing activities establish the performance, functionality, and reliability characteristics of the new device with respect to the predicate. Testing involved system level tests, performance tests, and safety testing from hazard analysis. Pass/Fail criteria were based on the specifications cleared for the predicate device and

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test results showed substantial equivalence. The results demonstrate that ST/AR Release J.0 meets all defined reliability requirements and performance claims.

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Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

MAR 13 2008

Philips Medical Systems c/o Ms. Zety Billard Regulatory Affairs Specialist Ultrasound and Monitoring Systems 3000 Minuteman Road Andover, MA 01810-1099

Re: K080461

Star St and Arrhythmia Software

Regulation Number: 21 CFR 870.1025

Regulation Name: Arrhythmia detector and alarm (including ST-segment measurement

and alarm)

Regulatory Class: Class II (two) Product Code: MLD, DSI, MHX

Dated: February 15, 2008 Received: February 20, 2008

Dear Ms. Billard:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050. This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

3.1 ODE Indications Statement

510(k) Number (if known):	
Device Name: ST/AR ST and Arrhythmia Software	
Indications for Use:	
Where the clinician decides to monitor cardiac arrhythmia of adult, pediatric patients and/or ST segment of adult patients to gain information for treatmen adequacy of treatment, or to exclude causes of symptoms.	, and neonatal t, to monitor
The intended use of the ST/AR cardiotach is to monitor a neonatal, pediatric, ECG for heart rate and produce events/alarms for one or two ECG leads. The is capable of monitoring both paced and non-paced patients.	, or adult patient's cardiotach function
The intended use of the ST/AR arrhythmia analysis algorithm is to monitor a or adult patient ECG's for heart rate and ventricular arrhythmias, and produc one or two ECG leads. The arrhythmia analysis algorithm is capable of moni and non-paced patients.	e events/alarms for
The intended use of the ST/AR ST analysis algorithm is to monitor an adult p ST segment elevation or depression and produce events/alarms for all possibl ST analysis algorithm is capable of monitoring paced and non-paced adult page 1.	le ECG leads. The
Note: The ST algorithm does not analyze ventricularly paced or ve beats.	entricular ectopic
The intended use of the ST/AR QT/QTc analysis is for use by the physician is assessment process indicated for neonatal, pediatric and adult patients with an symptoms of arrhythmia. QT measurement is intended to be used by qualified professionals in hospital or clinical environments. Composite QT (single or measures the interval only and is not intended to produce any interpretation of measurements.	nd without ad health nulti-lead derived)
Prescription Use X (Part 21 CFR 801 Subpart D) AND/OR Over-The-Counter (21 CFR 801 Subpart D)	
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANO NEEDED)	THER PAGE OF
Division Sign-Off) Concurrence of CDRH, Office of Device Evaluation (ODE Ivision of Cardiovascular Devices	
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Indications for Use